

Notice of Allowability

Application No.

10/510,583

Applicant(s)

AUNER, NORBERT

Examiner

Art Unit

Chukwuma O. Nwaonicha

1621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 16 January 2007.
2. ☒ The allowed claim(s) is/are 24-31, 33-40, 52, 53 and 55 (now renumbered 1-19, respectively).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

THURMAN V. PAGE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600

DETAILED ACTION

Current Status

1. This action is responsive to Applicants' amendment of 16 January 2007.
2. Receipt and entry of Applicants' amendment is acknowledged.
3. Claims 24-31, 33-40, 52, 53 and 55 are under active consideration in the instant application.
4. The rejection of claims 24-31, 33-40, 52, 53 and 55 under 35 U.S.C. 103 as being unpatentable over Griesshammer et al., {CN 1153138} for the reasons set forth in the previous Office Action of 10/16/06 has been withdrawn following applicants amendment.

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with William Conger on 4/20/07.

The Application has been amended as follows:

In claims 24, page 2, line 5 from the bottom delete "organohalogen compounds and hydrogen;"

Allowed Claims

Claims 24-31, 33-40, 52, 53 and 55 are allowable over the prior art of record.

Reason For Allowance

The following is an examiner's statement of reasons for allowance: Applicant claims a process for preparing halogen-containing silanes of the general formula 1, comprising reacting silicon, under the action of microwave energy, with elements or compounds selected from the group consisting of halogen and organohalogen compounds; organohalogen compounds and hydrogen halides, and hydrocarbons and hydrogen halides; wherein all the variables are define in the claims. The process was neither found to be obvious nor anticipated by the prior art of record.



formula 1

The closest prior art is Griesshammer et al., {CN 1153138}. Griesshammer et al. teach a process producing trichlorosilane under microwave condition; the process comprises reducing tetrachlorosilane in a fluidised bed reactor containing Si particles, in which a reaction gas containing H₂ and tetrachlorosilane is passed through the fluidised bed to react with the Si particles and produce a product gas containing trichlorosilane. See abstract.

However, the Examiner notes that Griesshammer et al. does not employ the same reactants. While Griesshammer et al. employed a gas containing H₂ and tetrachlorosilane while applicants claim a process that employs organohalogen compounds (alkyl halides) and halogen, organohalogen compounds and hydrogen halides or hydrocarbons and hydrogen halides. These differences are not readily apparent and would not have been suggested to one of ordinary skill.

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All claims (24-31, 33-40, 52, 53 and 55) are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chukwuma O. Nwaonicha whose telephone number is 571-272-2908. The examiner can normally be reached on Monday thru Friday, 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman k. Page can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chukwuma O. Nwaonicha, Ph.D.
Patent Examiner
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THURMAN K. PAGE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600
Thurman Page,